WHAT IS CLAIMED IS:

1. A nuclear camera system comprising:

a detector which acquires radionuclide event data;

an image processor which processes the event data to produce image data;

an image data storage medium which stores the image data; and

an image data processor which formats the image data for storage on the storage medium in an extensible and open data format.

2. The nuclear camera system of Claim 1, wherein the image data processor formats the image data in xml format.

3. The nuclear camera system of Claim 1 or 2, wherein the data format is self-descriptive.

4. The nuclear camera system of Claim 3, wherein the data format further comprises format definitions which are available with the image data.

5. The nuclear camera system of Claim 4, wherein a format definition describes the relationship between two or more pieces of image data.

6. The nuclear camera system of Claim 5, wherein the image data is stored in a data file; and wherein the image data file contains a pointer to a file storing a definition of the image data format.

7. The nuclear camera system of Claim 6,

wherein the pointer is to an address of a file stored on the nuclear camera system.

8. The nuclear camera system of Claim 6, wherein the pointer is to a URL address where the image data definition file may be found.

9. The nuclear camera system of Claim 6, wherein the image data file is of the form <image.xml> and wherein the image data format definition file is of the form <image.dtd>.

10. A nuclear camera system comprising:

a detector which acquires radionuclide event data;

an image processor which processes the event data to produce image data;

an acquisition controller which acts to control the detector to acquire event data in accordance with a study protocol; and

a control data storage medium, coupled to the acquisition controller, which stores control data in an extensible and open data format.

11. The nuclear camera system of Claim 10, wherein the control data is stored in xml format.

12. The nuclear camera system of Claim 11, wherein the control data comprises at least one of protocol data, collimator data, isotope data, and energy window data.

13. The nuclear camera system of Claim 12, wherein the control data is of at least one of the forms of protocols.xml, collimators.xml,

isotopes.xml, and energywindowsets.xlm.

14. The nuclear camera system of Claim 12, wherein the acquisition controller executes a script utilizing an xml file to control the acquisition of event data.

15. The nuclear camera system of Claim 14, wherein the xml file utilized by the script is a protocol file of the form <protocol.xml>.

16. The nuclear camera system of Claim 13, wherein an xml files point to a format definition file of at least one of the forms of protocols.dtd, collimators.dtd, isotopes.dtd, and energywindowsets.dtd.

17. A nuclear camera system comprising:

a detector which acquires radionuclide event data;

an image processor which processes the event data to produce image data;

an acquisition controller which acts to control the detector to acquire event data in accordance with a study protocol; and

a control data storage medium, coupled to the acquisition controller, which stores control data in xml format, the control data comprising xml files provided by the camera system manufacturer and xml files modified or created by a camera user.

18. The nuclear camera system of Claim 17, further comprising an image data storage medium, coupled to the image processor, which stores image data in xml format.

19. The nuclear camera system of Claim 18, further comprising a user interface and a server, responsive to the user interface and coupled to the control data storage medium and the image data storage medium, which accesses xml control data files or xml image data files in response to user commands.

20. The nuclear camera system of Claim 19, wherein the server executes scripts which utilize xml control data files.